JVC

SERVICE MANUAL

MODEL
KD-A11 A/B/C/E/J/U
STEREO CASSETTE DECK



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Specifications

: Stereo cassette deck : 4-track, 2-channel : 17/8 inch/sec (4.8 cm/sec) *1;40—11,000 Hz (± 3 dB) *2;40—8,000 Hz (± 3 dB) *3;40—8,000 Hz (± 3 dB)	Motor : Fast forward time : Rewind time : Semiconductors : Input terminals : Mic jack x 2 ;	Electronic governed DC motor 95 sec. with C-60 cassette 95 sec. with C-60 cassette 3 ICs, 21 transistors, 17 diodes 1 LED Max. sensitivity; 0.2mV (-72 dBs)
*1;30–16,000 Hz 40–15,000 Hz (±3 dB) *2;30–16,000 Hz	Input jack x 2 ;	Matching impednace; $600\Omega - 10k\Omega$ Min. input level; $80mV$ (-20 dBs)
*3;30–15,000 Hz (± 3 dB) *3;30–15,000 Hz 40–14,000 Hz (± 3 dB)	Output terminals : Output jack x 2;	Input impedance; $100k\Omega$ Output level; $300mV$
15 500 H METAFINE or Equivalent A or Equivalent	Phones jack x 1;	Output impedance; $5k\Omega$ Output level; $0.3mW$ (8Ω) Matching impedance;
: 60 dB (from peak level, weighted, Metal tape)	DIN socket :	$8\Omega - 1k\Omega$ Min. input level; $0.1 \text{mV/k}\Omega$ Input impedance; $10k\Omega$
The S/N is improved by 5 dB at 1 kHz and by 10 dB above 5 kHz with DOLBY N.R. on (DIN 45 500 weighted): 0.05% (WRMS),	Power requirement :	Output level; 380mV Output impedance; $5\text{k}\Omega$ AC 240V, 50Hz (KD-A11A) AC 240/220/120V, $50/60\text{Hz}$
0.15% (DIN 45 500) : 65 dB (1 kHz) : K3; 0.5%, THD; 1.0%	Dower consumptions	(KD-A11B/C/E/J) AC 240/220/120/100V, 50/60 Hz (KD-A11U)
: AC bias : AC erasure : 2 heads	-	10W 16-1/2" (420 mm)W 5-1/4" (134 mm)H 10-3/8" (264mm)D
METAPERM head for recording/ playback and 2-gap ferrite head for erasure	Weight :	9.9 lbs (4.5 kg) ions are subject to change
	: 4-track, 2-channel : 1-7/8 inch/sec (4.8 cm/sec) *1; 40—11,000 Hz (± 3 dB) *2; 40—8,000 Hz (± 3 dB) *3; 40—8,000 Hz (± 3 dB) *1; 30—16,000 Hz (± 3 dB) *2; 30—16,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) B 500 H METAFINE or Equivalent A or Equivalent L UD or Equivalent : 60 dB (from peak level, weighted, Metal tape) The S/N is improved by 5 dB at 1 kHz and by 10 dB above 5 kHz with DOLBY N.R. on (DIN 45 500 weighted) : 0.05% (WRMS), 0.15% (DIN 45 500) : 65 dB (1 kHz) : K3; 0.5%, THD; 1.0% (metal tape, 1 kHz 0 VU) : AC bias : AC erasure : 2 heads METAPERM head for recording/ playback and 2-gap ferrite head	: 4-track, 2-channel : 1-7/8 inch/sec (4.8 cm/sec) *1; 40—11,000 Hz (± 3 dB) *2; 40—8,000 Hz (± 3 dB) *3; 40—8,000 Hz (± 3 dB) *1; 30—16,000 Hz (± 3 dB) *2; 30—16,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) *3; 30—15,000 Hz (± 3 dB) *40—14,000 Hz (± 3 dB) *A or Equivalent LUD or Equivalent LUD or Equivalent : 60 dB (from peak level, weighted, Metal tape) The S/N is improved by 5 dB at 1 kHz and by 10 dB above 5 kHz with DOLBY N.R. on (DIN 45 500 weighted) : 0.05% (WRMS), 0.15% (DIN 45 500) : 65 dB (1 kHz) : K3; 0.5%, THD; 1.0% (metal tape, 1 kHz 0 VU) : AC bias : AC erasure : 2 heads METAPERM head for recording/ playback and 2-gap ferrite head

Features

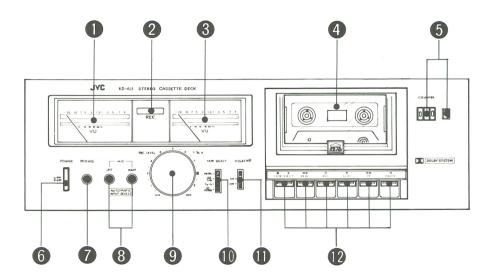
- Single lever 4-stage tape select switch makes the KD-A11 compatible with all types of tape including the new metal Tape format.
- IC-built Dolby*Noise Reduction System
 Dolby System greatly improves performance by cutting out tape hiss, without changing the original music, thus making it every bit as good as professional standard type

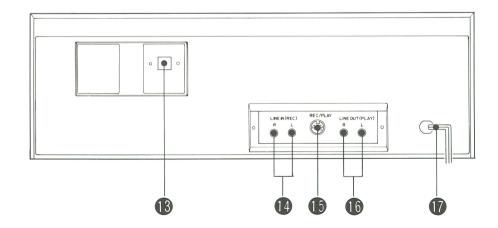
open reel tapes. High reliability and optimum quality

- are assured through employment of IC-built circuitry. (Dolby* is trademark of Dolby Laboratories Inc.)

 (Noise Reduction System manufactured under license from Dolby Laboratories Inc.)
- METAPERM head for recording/playback
 2 Gap ferrite head for erasure
- Automatic input select

Controls and Connections

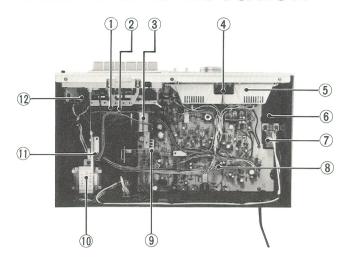




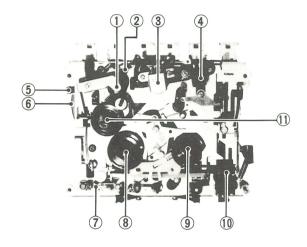
- **10 3** VU meters
- 2 Recording indicator (REC)
- Cassette holder
- Tape COUNTER/counter reset button
- 6 POWER switch
- PHONES jack
- MIC jacks
- REC LEVEL controls
- TAPE SELECT switch
- Dolby noise reduction switch (DOLBY NR)

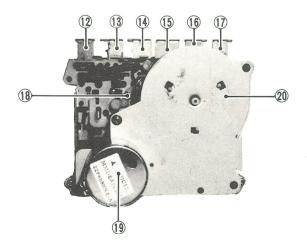
- ② Cassette operation buttons.
 - ▲ STOP/EJECT button
 - ■■ REWIND button
 - Record button (REC)
 - PLAY button
 - ▶▶ FF button
 - PAUSE button
- Voltage select switch (KD-A11 B/C/E/J/U)
- LINE IN (REC) terminals
- **I** DIN (REC/PLAY) socket
- **I** LINE OUT (PLAY) terminals
- Power cord

Main Parts Location



- 1. Flywheel/capstan belt
- 2. Auto stop solenoid
- 3. Motor
- 4. Recording indicator P.W.B.
- 5. Meter cover
- 6. Remote bar
- 7. Power switch P.W.B.
- 8. Main Amp P.W.B.
- 9. Recording spring
- 10. Power Transformer
- 11. Oiled-gear damper assembly
- 12. Reed switch P.W.B.





(Mechanical parts)

- 1. Pinch roller arm assembly
- 2. Pinch roller spring
- 3. REC/PB Head
- 4. Erase Head
- 5. Pause switch
- 6. Flywheel
- 7. Motor switch
- 8. Take up reel disc ass'y
- 9. Supply reel disc ass'y
- 10. Recording safety lever
- 11. Take up idler assembly
- 12. Stop/eject bar assembly
- 13. Rewind bar assembly
- 14. Recording bar assembly
- 15. Play bar assembly
- 16. Fast forward bar assembly
- 17. Pause bar assembly
- 18. Motor
- 19. Flywheel/Motor bracket

Maintenance

To get long, trouble-free service, maintenance is important. Do not forget cleaning and demagnetizing.

Cleaning

After long use, the heads and tape part — capstan, pinch roller, etc. — will become dirty with dust or magnetic particles. Dirty heads cause imperfect erasing or high frequency drop-off. A dirty capstan and pinch roller will cause unstable tape speed, leading to increased wow and flutter. Always keep them clean by following the procedure below.

1. Heads

- 1) Push Eject button to open the cassette holder.
- 2) Use the head cleaning stick provided to wipe the surface where the tape comes into contact with the head.
 (It is effective to moisten the cotton with alcohol.)

2. Pinch rollar and capstan

Do the same method as heads.

3. Cabinet

When the cabinet becomes dirty, wipe it with a soft cloth soaked with a neutral cleaning solution of a polishing cloth.

* Do not use thinner or benzine.

Demagnetizing

The heads are made from a material resistant to magnetization, but after long use they become magnetized.

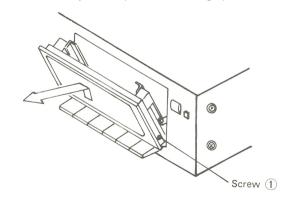
A magnet brought into their vicinity can magnetize the heads, causing excess noise. If noise seems to have increased, demagnetize the heads with a head demagnetizer through the following procedure.

- 1. Turn the POWER switch OFF.
- 2. Wrap the tip of the demagnetizer with vinyl tape or soft cloth so as not to damage the head surface. Switch on the demagnetizer and bring it close to the head.
- 3. Move the tip of the demagnetizer slowly first to the left and right, then up and down in front of the head.

 Gradually move it away from the head and switch it off at a distance of more than 30 cm. (12")
- 4. The erase head need not be demagnetized. The capstan shaft and tape guide should be demagnetized in the same way as the record/playback head.
- * Do not bring a magnetized metallic object (a screwdriver, for example) near the head as this will increase noise.

Removal of the Main Parts

Observe care in handing the parts since the parts are small in size and the distance between them are short due to a deck design aimed mainly at compactness and high performance.

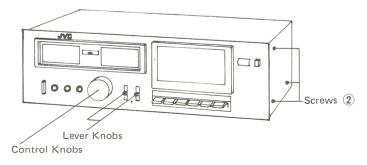


ENCLOSURE ASSEMBLY PARTS

Cassette lid

- 1) To open the cassette lid, push on the eject lever.

 Remove a screw 1 fastening the cassette lid. (its right low side)
 - Be careful of holding a nut.
- 2) Pull off the cassette lid to upper side.



Top cover

Remove 6 screws (left and right 3 screws ② on each)

Control knobs (REC LEVEL)

Pull off them to forward.

Lever knobs (TAPE SELECT, DOLBY NR)

Pull off them to forward.

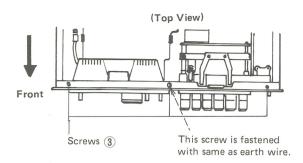
Bottom cover

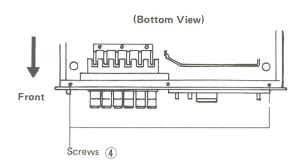
Remove 3 screws fastening the bottom cover. (center screw is long size.)

Remove the bottom cover from 3 pawls of mold chassis.

Front plate assembly

Remove 5 screws (3 screws ③ on upper side and 2 screws ④ on bottom side.) fastening the front plate assembly.

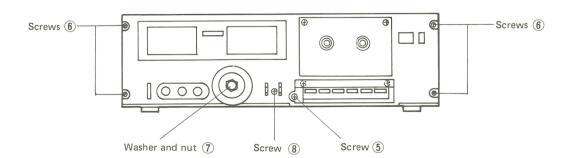




Front panel assembly

- 1. Remove a screw 5 fastening the button escutcheon ass'y (left side)
- 2. Open the cassette holder, and remove a screw fastening the arm ass'y for oiled-gear damper.
- 3. Remove 4 screws (6) fastening the front panel. (left and right 2 screws on each)
- 4. Remove a washer and a nut 🗇 fastening the REC LEVEL control VR shaft.
- 5. Remove a screw (8) fastening the lever switch on main amp P.W. Board ass'y.

 (Mechanical assembly is removed with the same as front panel.)



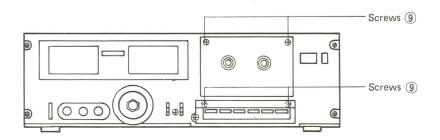
MECHANICAL ASSEMBLY

- 1. Remove the counter belt from counter.
- 2. Remove 4 screws (9) fastening the front panel.

If you remove the mechanical assembly with not removed the front panel, do the following method.

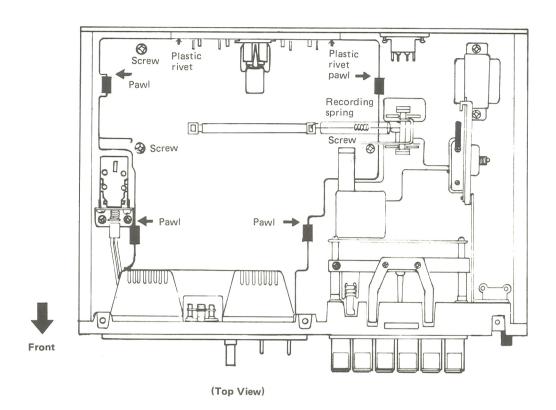
1) Remove the mecha control plate.

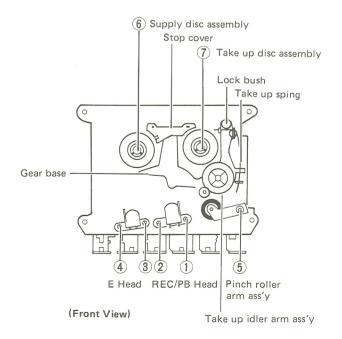
2) Remove 4 screws (9) fastening the front plate.
(When assembling the mechanical control plate, it need a new parts = the mechanical control plate cannot use again.)



ELECTRICAL PARTS (Main amp P.W. Board ass'y)

- Remove a nut and a washer fastening the REC LEVEL control VR shaft.
- 2) Remove a screw fastening the lever switch.
- 3) Remove 3 screws fastening the main amp P.W. Board.
- 4) Remove 2 plastic rivets fastening the PIN jack assembly.
- 5) Remove the record spring.
- 6) Remove 4 pawls for holding the main amp P.W. Board.





MECHANICAL PARTS

1. REC/PB head

Remove a screw ① for adjustment.

2. Erase head

Remove a screw (3)

Remove a screw 4 for adjustment.

3. Pinch roller arm ass'y

Remove an E-ring (5) holding its assembly. Pull it off from the shaft.

4. Supply reel disc

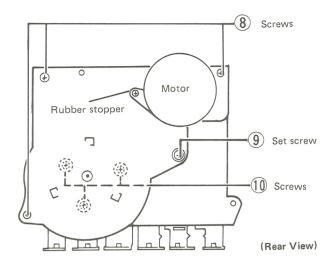
Pull out the reel disc stopper (6) and pull out its disc from shaft.

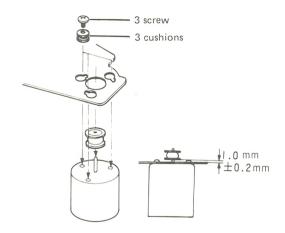
5. Take-up reel disc

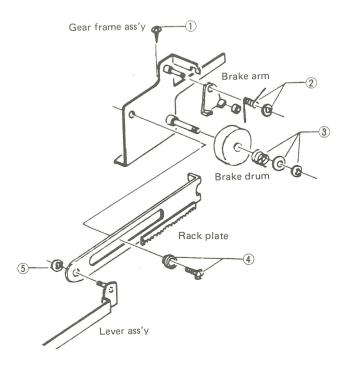
Pull out the reel disc stopper 7 and remove the counter belt, pull out its disc from shaft.

Note: (1) Remove the reel disc stoppers with a piece of sheet metal inserted between the reel disc and the stopper. (When assembling the reel disk, the stopper need a new parts. (the stopper can not use again.)

(2) Be careful not to stain the counter belt.







Flywheel assembly

- 1. Remove 3 screws (8) and a set screw (9) fastening the flywheel and motor bracket.
- 2. Remove a capstan belt.
- 3. Remove 3 screws fastening the capstan metal.
- 4. Remove the pressure lock bushing and the take up spring on front side, and then remove the take up idler arm assembly.
- Remove the pressure position of stopper cover, and move the gear base to supply disc direction, and then remove the gear base tip from the groove of capstan metal
- 6. Pull off the flywheel assembly.

Note: When assembling the flywheel, fasten the screws after assembled the chassis to the groove of capstan metal.

Motor

- 1) Remove a screw fastening the rubber stopper.
- 2) Remove the capstan belt from the motor pulley.
- 3) To remove the motor, turn it in counterclockwise direction and pull it out backward (with 3 cushions and 3 screws for fastening the motor).

Note: When replacing the motor, check the following points.

- Is the motor placed in correct position?
 (Don't make the motor's position deflective.)
- (2) Does the capstan belt run in the center of the motor pulley?

DOOR BRAKE AND ITS RELATED PARTS

- 1. Gear frame ass'y Remove a screw (1).
- 2. Brake arm and tireRemove the E-ring and torsion spring (2).
- 3. Spur gear and brake drum Remove the E-ring, and spring ③.
- 4. Rack plate Remove the screw and the collar 4.
- 5. Brake lever ass'y Remove the E-ring (5).

Main Adjustments

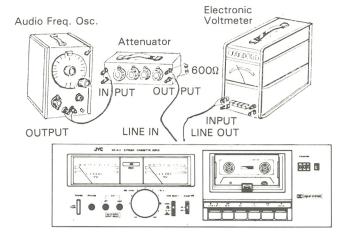
[I] Equipment and measuring instruments used for adjustment.

1. Electrical adjustment

- 1) Electronic voltmeter
- 2) Audio frequency oscillator (range; 50–20 kHz and output 0 dB with impedance 600 $\Omega)$
- 3) Attenuator
- 4) Standard tapes for REC/PB
 SONY CS-30 FeCr tape
 BASF T308S NORMAL tape
 BASF C401R CrO2 tape
 SCOTCH METAFINE METAL tape
- 5) Reference tapes for playback (JVC Test Tape)
 VTT-658 (for head azimuth adj.)
 VTT-656 (for motor speed, wow flutter adj.)
 VTT-664 (for Reference level 1 kHz)
 VTT-675N (for playback frequency response)
- 6) Resistors 100 Ω (for measurement of the bias current) 600 Ω (for attenuator matching)



- 1) Gauge for checking the head position.
- 2) Torque gauge
- 3) Blank tape (C-120) for tape running checker.



KD-A11

[II] Adjustment and repair of the mechanism

(Adjust the mechanism or confirm that it is in normal operating condition prior to the adjustment of the electrical circuit.)

Item	Adjustment	Adjusting point	Standard value	Remarks
Adjusting record/ playback head position	 Connect an electronic voltmeter to the LINE OUT terminals. Play back the VTT-658 test tape. Adjust the head angle with the screw (A) until the reading of the electronic voltmeter becomes maximum for both channels. After adjusting, set the screw with screw bond. 	Screw (A)	Maximum	1. If the head is worn, disconnected or exceedingly magnetized so as not to provide the necessary characteristics, replace it with a new one. After replacement, the head position adjustment as well as the playback level adjustment, the bias current adjustment and the recording level adjustment are all necessary.
Adjusting erase head height	 Tape-to-head contact adjustment Turn the adjusting screw for aligning the erase head until it stops. Then, turn the screw in the reverse direction by 180° (a ½ revolution). Employ a special cassette (C-120) from which parts to the casing, where the erase head, record/play back head and capstan engage, has been cut away. Perform tape transport with the cassette tape. Adjust the screw until the tape runs in the center of the egase head tape guide. Check it again with a BASF C401R-CrO2 tape. Checking method: Record a 400 Hz or 1 kHz signal with 0VU+20dB. Erase the recording. Check if the erasing is satisfactorily performed. After adjustment, apply screw bond on the adjusting screw to prevent its loosening. 	Prop	e guide	2. If the output difference between the left and right channels exceeds 3—4 dB, the head is defective. Replace it with a new one. Be sure to perform this adjustment after replacing the erase head.

Item	Adjustment	Adjusting point	Standard value	Remarks
Adjusting motor speed	Connect a speed meter to the LINE OUT terminals. Play back the VTT-656 test tape Adjust the semi-fixed resistor in the motor until the reading of the speed meter is 3000 Hz.	Semi-fixed resistor in the motor	3000 Hz	If the speed meter functions as a wow and flutter meter, also, connect the deck to the INPUT terminals of the meter.
Checking play- back torque	Employ a torque testing cassette tape for the checking, or remove the cassette cover and use a torque gauge.		40 ~ 70 gr-cm	If the standard torque is not obtained, replace the take-up reel disc assembly.
Checking fast forward torque	Measure the torque in the fast forward mode in the same manner as in the above.		More than 80 gr-cm	If the standard torque is not obtained, perform the following. 1. Clean the capstan belt, the idler circumference, the motor pulley, the take-up reel disc circumference, the flywheel circumference, etc. 2. Replace the capstan belt or idler ass'y.
Checking rewind torque	Measure the torque in the rewind mode in the same manner as in the above.		More than 80 gr-cm	If the standard torque is not obtained, clean the capstan belt, idler, motor pulley, flywheel circumference, supply reel disc circumference, etc.

[III] Repair of wow flutter

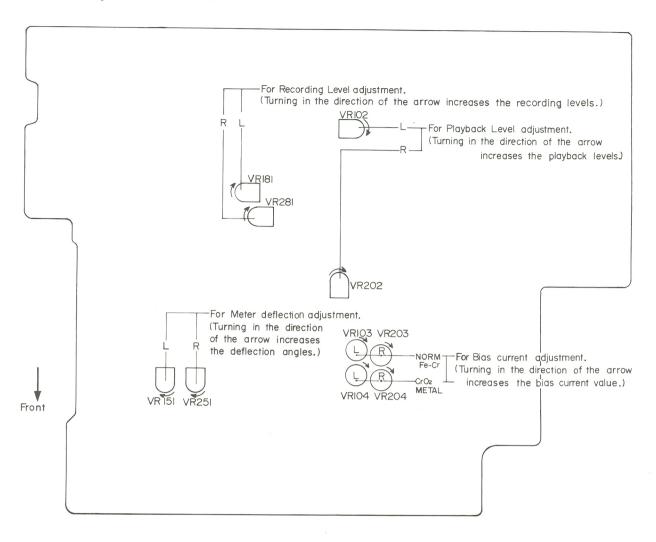
If wow and flutter increase, check the following points. If there is defect in revolving parts, the wow and flutter generated will increase in proportion to the number of revolu-

tions.

Play a 3000 Hz test tape, and defective part can be detected from the sound.

Section	Trouble	Repair
Capstan and flywheel	Capstan shaft has excessive run-out. Flywheel turns heavily. (shaft seisure, thrust play, etc.)	Replace flywheel. Clean the capstan shaft in the flywheel. Replace the capstan assembly.
Pinch roller	Rough rotation (Deformation scratches, or dust) The angular position of the pinch roller is not correct. The pinch roller pressure is not correct.	Replace pinch roller, or pinch roller spring. Clean the pinch roller. Adjust the pinch roller so that it is parallel with the capstan shaft.
Belt	Belt has undue run-out. Belt is dirty or slippery.	Check the belt. Replace the belt.
Back tension	Back tension is irregular, or back tension is too strong.	Replace back compression spring (under supply disc).
Motor	Motor shaft has undue run-out. Motor pulley is oily and dustry.	Replace motor. Clean motor pulley.

[IV] Electrical adjustments location



[V] Electrical circuit adjustment procedure

In all the steps (marked by an asterisk*) except the "Adjusting bias current", the adjustment is important. Be sure to perform it.

Adjustment should be performed in the sequential numerical order of the following:

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
1	Adjusting playback level	 Playback the VTT-664 Reference tape (1 kHz) with the Tape select switch set to the NORMAL position. Adjust VR 102 and VR 202 until the DIN OUT becomes 0.34V (about -7 dB). 	VR102, 202	0.34 V (-7 dB)	 This adjustment becomes necessary when a change in playback level results (for example, due to head replacement). Perform this adjustment with the Dolby N.R. switch set to OFF.
	Playback frequency response	Playback test tape VTT-675N (1 kHz, 10 kHz) for following adjustment. If the 10 kHz signal gain become nearly equal to the I kHz signal gain, cut off the wire tip 106. If the 10 kHz signal gain become low level, select 104 or 105 connector so that 10 kHz signal and 1 kHz signal gains become flat response.			

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
3*	Adjusting VU meter sensitivity	 Set the cassette deck to its recording mode. Apply a 1 kHz, approx10 dBs signal to the DIN IN terminals. Adjust the recording level controls until the signal is available at - 7 dBs at the DIN OUT terminals. Adjust VR 151 and VR 251 until the VU meters deflect to 0. 	VR151 251	0 VU	Perform the adjustment when the parts are replaced.
4	Checking record/ playback frequency response	Record 1 kHz, 100 Hz and 12.5 kHz signals at an input level of 0 VU to -20 dB. Play back the tape. Check to see that the 100 Hz and 12.5 kHz signal output deviations fall within the standard range, using the 1 kHz signal output as a reference. (It is basically desirable that the 1 kHz, 100 Hz and 12.5 kHz signal outputs are the same.	For normal tape: VR103, 203 For CrO2 tape: VR104, 204	Reference frequency; 1 kHz 0±3 dB at 100 Hz 0±3 dB at 12.5 kHz	This checking should be performed for normal, chrome and metal tapes and for both right and left channels. Fe-Cr and METAL tapes use only to check.
5*	Checking recording bias cur- rent	Record 1kHz, 100Hz and 12.5kHz signals at an input level of 0VU to -20dB. Play back the tape. Adjust VR103 and VR203 (for a normal tape), VR104 and VR204 (for CrO2 tape), until the indicated deviation of the 12.5 kHz signal output from the 1kHz signal output becomes 0.		Output deviation; 0	formed referring to the record/ playback frequency response. This is because the frequency response of a cassette deck depends more greatly upon the bias current than does that of an open reel deck. The current measuring method described below is an alternative one. 2. If the bias current is not properly adjusted the record and playback characteristics become as shown below. Increase in high frequencies (with a small bias current) Optimum level Decrease in high frequencies (with a larger bias current)
6	Adjusting recording level	 Apply a I kHz, approx10 dB signal to the DIN IN terminals. Adjust the recording level controls until the signal is available at -2 dBs at the DIN OUT. After checking to see if the VU meter becomes to 0, record the signal applied to both left and right channels using a normal tape. Play back the recorded part. Perform the recording signal adjustment with VR181 and VR281 so that the VU meter becomes to 0. 	VR142, 242	0 VU	The level difference between left and right channels for normal tape, chrome tape and metal tape should be less than 1 dB (1 VU). Perform the adjustment using a normal tape, level difference between recording and playback for CrO2 and metal tapes should be less than 1.5 dB, and that between left and right channels should also be less than 1 dB.
7.	Checking record/ playback signal dis- tortion	 Record a 1 kHz, 0 VU -7 dBs signal to DIN IN terminals and perform recording with the VU meter becomes 0 VU. Play back the recorded part. Check the output with a distortion meter to see if the value conforms to the standard value. 	Normal t less than		Be sure to perform this adjustment following bias current and recording level adjustments.

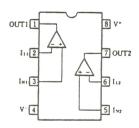
Step	Item	Adjustment	Adjusting point	Standard value	Remarks
8	Checking signal to noise ratio recording/ playback	 Record a 1 kHz, 0 VU signal. Stop the input by disconnecting from the terminal to perform non-signal recording. Playback the recorded part. Measure the 0 VU recording output and the non-signal recording output for comparison using an electronic voltmeter. Check to see if the value conforms to the standard value. 	Normal tape; More than 42 dB Chrome tape; More than 42 dB Metal tape; More than 42 dB		Apply an output (–20.5 dBs) to the DIN IN terminals with the recording level controls set to maximum so that the VU meter becomes to 0.
	Checking erasing co- efficient	 Apply a I kHz signal to the DIN IN terminals. Adjust the recording level controls until the VU meter becomes to 0. Erase a part of the recording. Measure the output difference between the erased part and non-erased part to compare with an electronic voltmeter. 		More than 65 dB	For the measuring, connect a band pass filter between the deck and the electronic voltmeter. Input

Integrant Circuit

[IC for Meter & HP Amp.]

UPC4557C

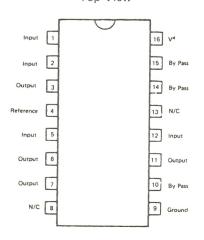
Top View

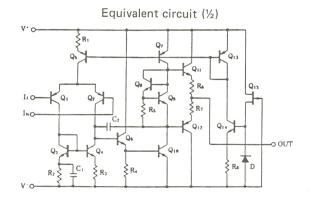


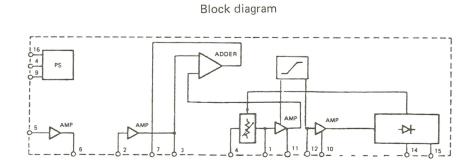
[IC FOR Dolby NR Circuit]

NE646BN

Top View

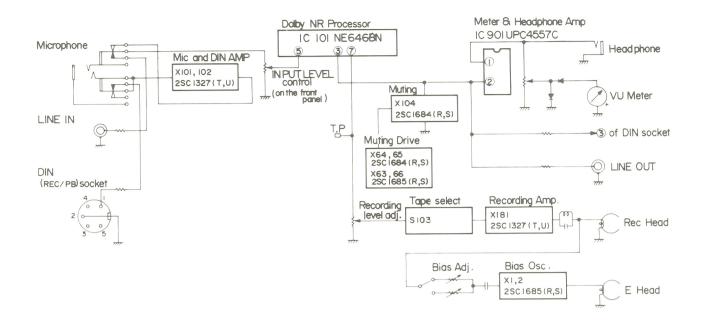




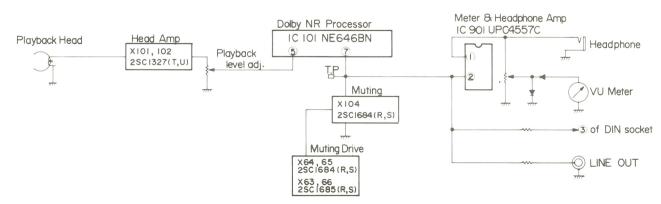


Block Diagram

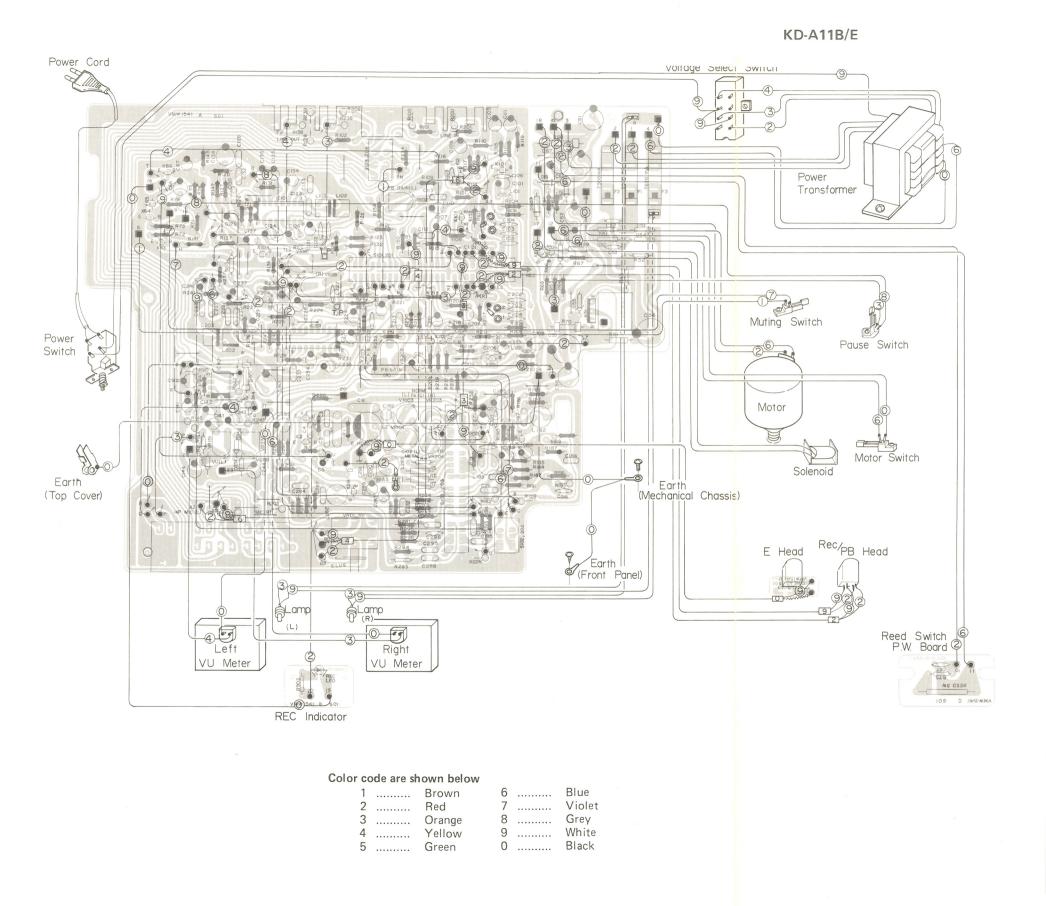
Recording system



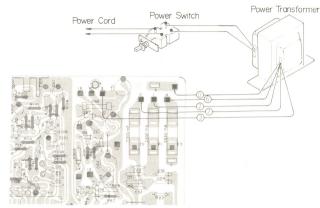
Playback system



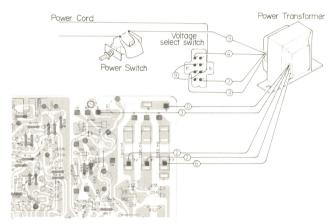
Wiring Connection



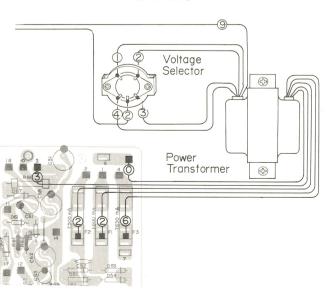
KD-A11A



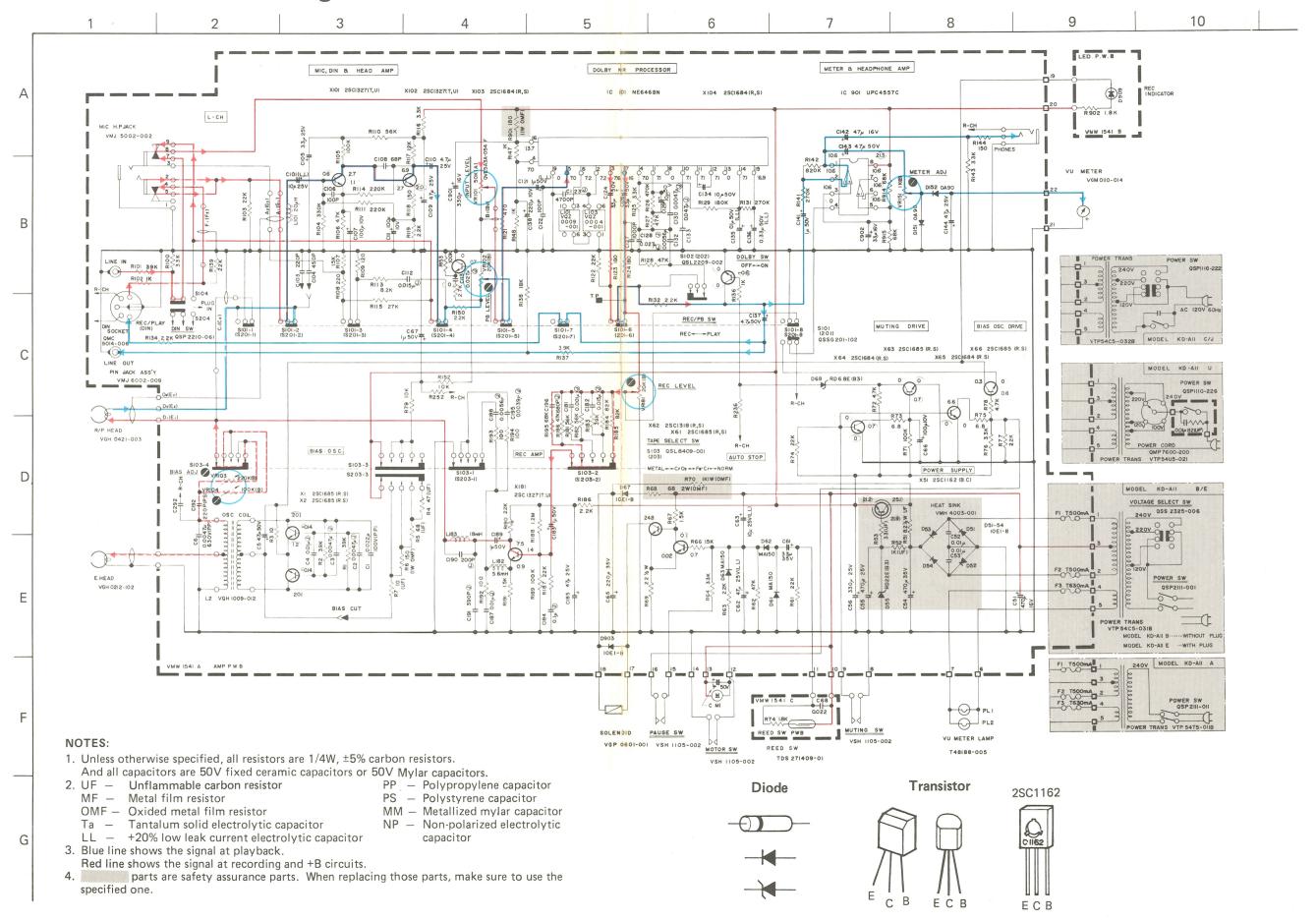
KD-A11C/J



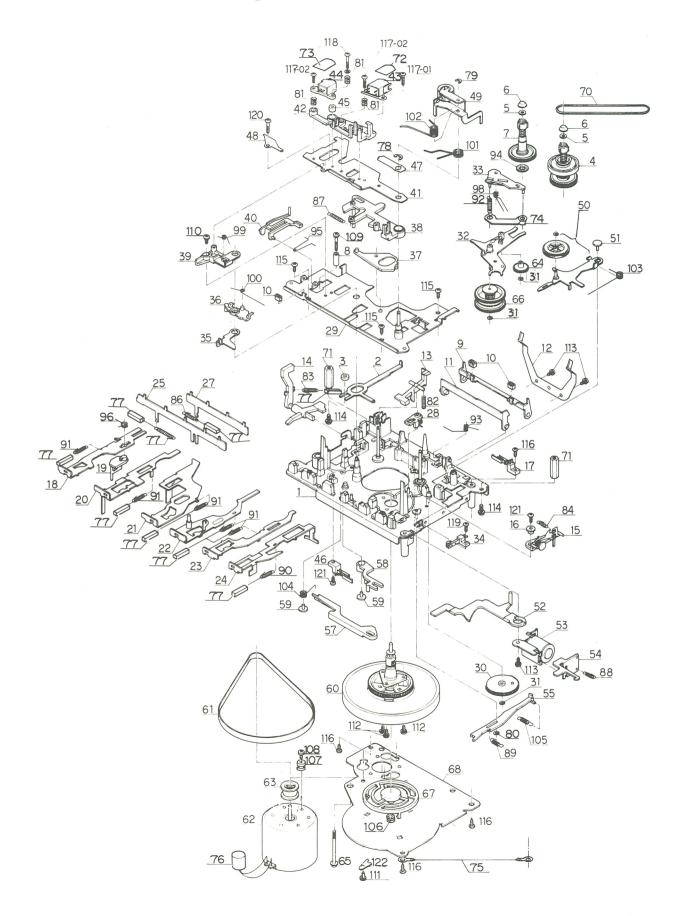
KD-A11U



Standard Schematic Diagrtam of KD-A11



Mechanical Component Parts



Mechanical Component Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1 2 3 4 5	VKL1171-00A VKL4733-001 VKS4213-001 VKR4165-00A VKR4170-001	Chassis Base Sub Ass'y Slide Bar Bushing Take up Disk Ass'y Ring	Brake	1 1 1 1 2
6 7 8 9 10	VKS4131-001 VKR4172-00A VKH3000-036 VKS4214-001 VKZ4137-001	Reel Stopper Supply Disk Ass'y Collar Brake Lever Brake Rubber		2 1 1 1 3
11 12 13 14 15	VKS4215-001 VKY4190-001 VKS4217-001 VKS4218-001 VKS4243-00A	Switch Lever Pack Spring Rec Safety Lock Arm Pause Bracket Ass'y		1 1 1 1
16 17 18 19 20	VKH3001-034 VSH1105-002 VKL4735-001 VKS4220-001 VKL4736-001	Flange Collar Switch Stop Bar Select Cam Rew Bar	for Motor	1 1 1 1
21 22 23 24 25	VKL4737-002 VKL4790-00A VKL4740-001 VKL4741-001 VKL4758-001	Rec Bar Play Bar Ass'y FF Bar Pause Bar Cam		1 1 1 1
27 28 29 30 31	VKL4789-001 VKS4244-00A VKL3236-00A VKR4179-001 VKZ4004-001	Sub Cam Spring Holder Ass'y Button Cover Ass'y Auto Cam Special Washer		1 1 1 1 3
32 33 34 35 36	VKL3245-00A VKS4222-001 VSH1102-001 VKL4745-002 VKF4105-001	Gear Base Ass'y Stopper Cover Switch Lock Plate Rew Lever	Pause	1 1 1 1
37 38 39 40 41	VKS4224-001 VKS3119-001 VKS4225-00A VKS4239-001 VKL3240-001	FF Lever Arm Arm Holder Ass'y Door Safety Head Base		1 1 1 1
42 43 44 45 46	VKS3120-001 VGH0421-003 VGH0212-102 VKH3000-035 VSH1105-002	Head Mount Base R/P Head E Head Collar Switch	for Mut	1 1 1 1
47 48 49 50 51	VKY4183-001 VKY4184-001 VKP4109-00A VKL4748-00A VKS4233-001	Spring Plate Pressure Plate Pinch Roller Arm Ass'y Take up Idler Arm Ass'y Lock Bush		1 1 1 1
52 53 54 55	VKS4228-001 VGP0601-003 VKL4861-001 *VKS4246-002	Select Arm DC Solenoid Ass'y Trigger Kick Lever		1 1 1

No. 4192 – 18 –

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
57	VKS4230-001	Select Bar	ì	1
58	VKS4231-001	Switch Arm		1
59	VKS4233-001	Lock Bush		2
60	VKF3112-00A	Flywheel Unit Ass'y		1
61	VKB3001-007	Belt		1
62	MMI-6B2HD	DC Motor		1
63	VKS4139-002	Motor Pulley		1
64	VKR4173-001	Rewind Gear		1
65	VKZ4009-001	Special Screw	İ	1 1
66	VKR4174-00A	F.F Gear Ass'y		1
67	VKS4232-001	Flywheel Holder		1
68	VKL4747-001	F. M. Bracket		1
70	VKB3000-012	Belt		1
71	VKH3011-003	Stud		1
72	VND4012-002	Head Plate	Meta Parm	1
73	THS000489-02	Head Label	2 Gap	1
74	VKS4248-001	Synchro Arm		1
75	VMZ0008-00B	Wire Ass'y		1
76	QET41HR-105N	E. Capacitor		1
77	VKZ4139-001	Silencer		9
78	REE3000	"E" Ring		1
79	REE2000	"		1
80	REE1500	"		1
81	VKW3001-036	Spring	Compression for REC/PB, E Head	1
82	VKW3001-050	"	Compression for REC safety	1
83	VKW3002-047	"	Tension for Lock arm	1
84	VKW3002-048	"	Tension for Pause Bracket	1
85	VKW3002-049	"	Tension for Main cam	1
86	VKW3002-050	"	Tension for Sub cam	1
87	VKW3002-051	"	Tension for Arm	1
88	VKW3002-057	"	Tension for DC solenoid	1
89	VKW3002-004	"	Tension for Kick Lever	1
90	VKW3004-003	"	Tension for Pause bar	1
91	VKW3004-002	. "	Tension Play Bar x 1 Select Cam x 1 Rew Bar x 1 Recording Bar x 1	5
92	VKW3002-053	11	FF Bar x 1 Tension	1
			Stop Cover	
93	VKW4206-001	"	Torsion Switch Bar	1
94	VKZ4003-003	Clutch felt	Back Tension	1
95	VKW4229-001	Spring	Torsion	1
96	VKW4209-001	n	Door Safety Torsion Select Cam	1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
97	VKW4210-001	Spring	Torsion EE bar	1
98	VKW4211-003	"	Torsion Stop Cover	1
99	VKW4212-001	"	Torsion Lock Plate	1
100	VKW4213-002	"	Torsion	1
101	VKW4214-003	"	Rew Lever Over stroke Pressure Plate	1
102	VKW4215-001	"	Torsion Pinch Roller	1
103	VKW4216-002	"	Torsion Idler Arm	1
104	VKW4217-001	"	Torsion Select Bar	1
105	VKW3005-001	"	Tension Kick Lever	1
106	VKW3001-048	"	Flywheel	1
107 108 109 110 111	VKZ4130-001 VKZ4109-001 SPSP2614Z LPSP2605Z LPSP2604Z	Cushion Rubber Motor Screw Screw	for Motor for Motor Pinch Roller Stud Arm Holder Rubber Stopper	3 3 1 1
112 113	LPSP2605Z SPSP2604Z	"	Flywheel Ass'y DC Solenoid x 1 Pack spring x 2	3
114 115 116	LPSP3006ZS SBSB2606Z SBSB2608Z	"	Stud Button Cover Ass'y Flywheel Bracket x 3 Motor Switch x 1	2 3 4
117-01 117-02 118 119 120	SPSX2008Z SPSX2010Z SPSX2014Z SPSP2606Z SPSP2010Z	" " " " "	Erase Head REC/PB Head Erase Head Pause Switch Pressure Plate	1 2 1 1
121	SPSP2604Z TFB345469-01	Rubber Stopper	Pause Bracket Ass'y x 1 Muting Switch x 1	2

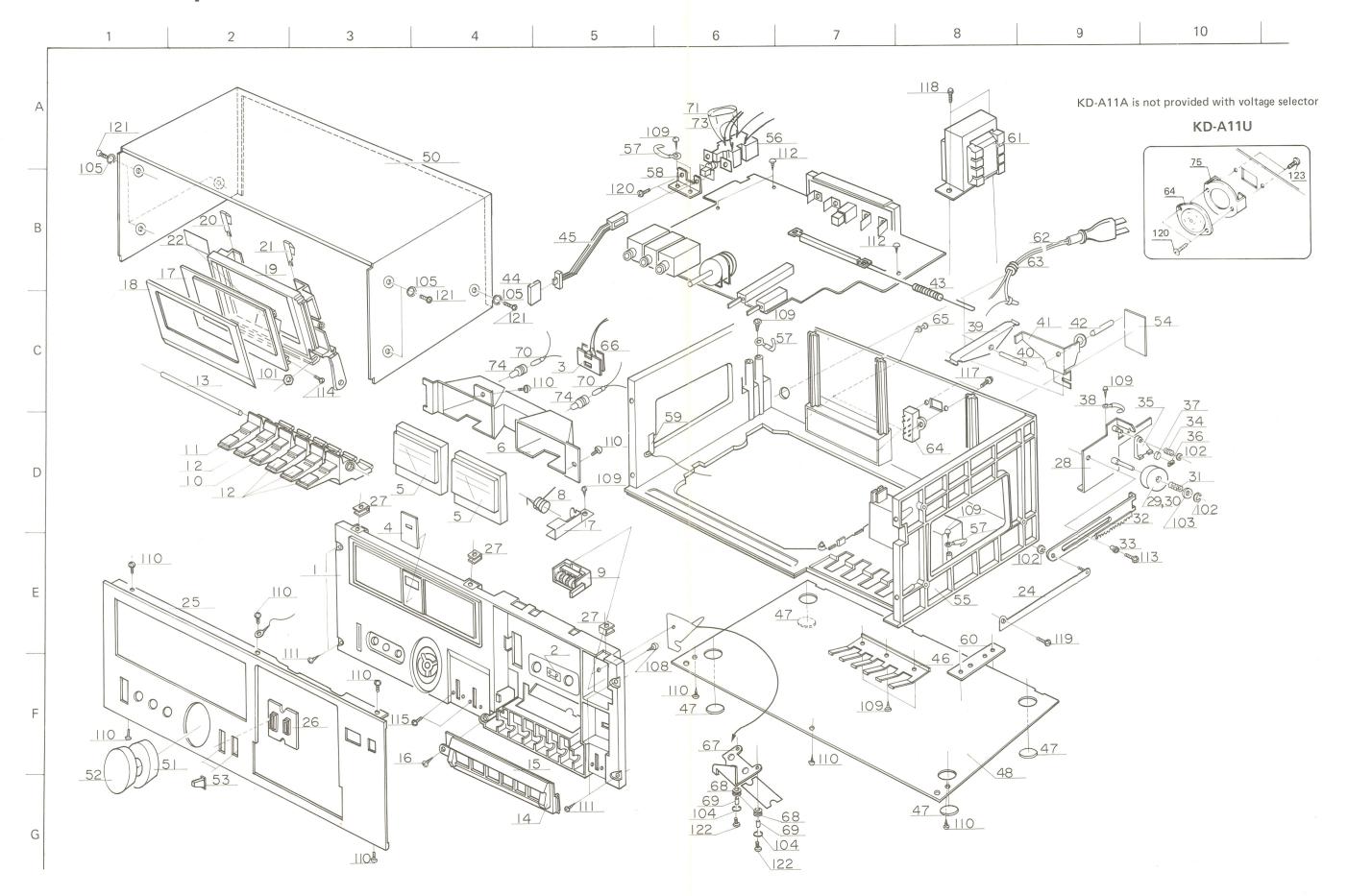
Enclosure Assembly and Electrical Parts list (Except P.W. Board Parts)

A parts are safety assurance parts. When replacing those parts, make sure to use the specified one.

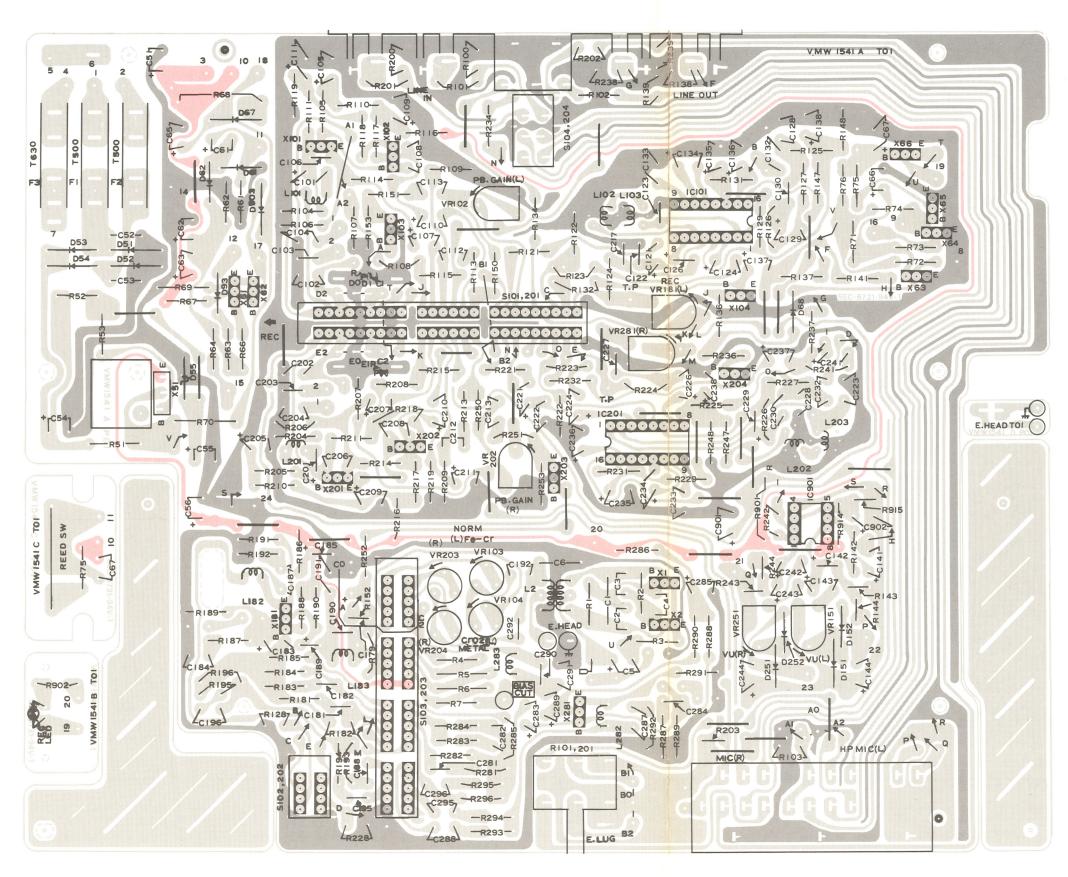
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
(1,2,4)	ZCKDA11Y-CBF-1	Front Panel Sub Ass'y		1 set
1	VJC1108-001	Front Panel		1
2 3	* VJD4162-002 * VJD4410-001	Reel Disk Plate		1
4	* VJD4369-002	Escutcheon	for Rec LED	1
5	VGM0110-014	Indicator Plate Level Meter		1
6	VKS2109-001	Lamp Cover		2
7	VKL4697-001	Spring Bracket	*	1
8	VKW4199-001	Spring	,	1
9	VKC5135-001T	Counter		1
10	* VXP3052-004	Mecha Button	Rec	1
11	* VXP3052-005	"	Stop	1
12	* VXP3052-006	"	o top	4
13	VKH4268-001	Shaft	for Mecha Button	1
14	VJD3221-001	Button Escutcheon	in in botte Batton	i
15	* VJD4370-002	Control Plate		1
16	VKZ4007-001	Special Screw		li
(17~18)	ZCKDA11Y-CCA	Cassette Door Sub Ass'y	200	1 set
17	VJT3052-001	Cassette Lid		1
18	VJT3053-001	Lid Plate		1
19	VJT2041-001	Cassette Holder		1
20	VKY4178-001	Cassette Spring		1
21	VKY4178-002	"		1
22	* VJD4378-003	Mark	Meta Parm	1
23	VYSR102-014	Spacer		1
24	VKL4698-00A	Arm Ass'y	Cassette Holder	1
(25,26)	ZCKDA11Y-CBF-2	Front Plate Ass'y		1 set
25	* VJC1107-003	Front Plate		1
26 27	* VJD3222-003	Lever Escutcheon		1
28	TFB313563-02	Plate Nut		3
29	VKL4169-00A VKS4236-001	Gear Frame Ass'y		1 set
30	VKS4236-001 VKS4109-004	Spur Gear Brake Drum		1
31	VKW3001-006	Spring		1
32	VKS3102-001	Rack Plate		1 1
33	VKH4123-001	Collar		1
34	VKW4106-001	Torsion Spring		1
35	VKS4110-002	Brake Arm		1 1
36	VKL4271-001	Rubber Retainer		1
37	VKZ4111-001	Rubber Tire		1
38	VKZ4001-011	Wire Holder		li
39	VKL4163-001	Rec. Arm (1)		1
40	VKH4121-001	Shaft		1
41	VKL4164-001	Rec. Arm (2)		1
42	VKH4121-002	Shaft		1
43	VKW4244-001	Rec. Spring		1
44	VXP4066-001	Push Button	Power	1
45	VKS4209-001	Remote Bar	Power	1
46	VKY4111-002	Button Spring	Amp chassis	1
47	VJF4003-001	Foot	Amp chassis	4
48	VKL2123-001	Bottom Cover		1
49	VKL4291-002	Shield Plate		1
50 51	VJC1109-001	Top Cover		1
52	VXL4124-00A	Knob Ass'y		1
53	VXL4125-00A	Lover Knob		1
54	VXQ4030-001 VYN2068-002LA	Lever Knob Name Plate	IZD A44A	2
J-4	VYN2068-002LA VYN2068-001LA	ivame riatë	KD-A11A	1
		"	KD-A11B	1
	" "UUSI V		KD-A11C	1 1
	-003LA	"	KD A11E	
	" -004LA	11 11	KD-A11E	1
	′′ -004LA ′′ -007LA		KD-A11E(SP)	1 1
	" -004LA " -007LA " -005LA	n .	KD-A11E(SP) KD-A11J	1 1 1 1
55	" -004LA " -007LA " -005LA	"	KD-A11E(SP)	1 1 1 1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
56	△ QSP2111-011	Power Switch	KD-A11A/E	1
		"	KD-A11B	1
	⚠ QSP1110-222	"	KD-A11C/J	1
	△ QSP1110-226	"	KD-A11U	1
57	VKZ4001-010	Wire Holder		4
58	VKL4194-001	SW Bracket		1
59	VKY4181-001	Earth Lug	for Top Cover	i
60	VKL4167-001	Transformer Bracket	101 100 00101	i
	⚠,VTP54T5-011B	Power Transformer	KD-A11A	1
	VTP54U5-021	"	KDA-11U	1
61	↑ VTP54C5-031BBS	"	KD-A11B	1
01	△ VTP54C5-031B	,,	KD-A11B KD-A11C/E/J	1
62	△ QMP2560-200	Power Cord	KD-A11A	1
02	△ QMP1200-200	" "	KD-A11A KD-A11C/J	1
	△ QMP3900-200	"	KD-A11E	1
	△ QMP9017-008BS	"		
63	△ QHS3876-252	Cturius Ballint	KD-A11B	1
03	△ QHS3876-252BS	Strain Relief	KD-A11A/E	1
		"	KD-A11B	1
0.4	△ QHS3056-252		KD-A11C/J	1
64	△ QSS2325-011	Slide Switch	for Voltage Selector	1
			KD-A11C/E/J	
	△ QSS2325-011BS	Slide Switch	for Voltage Selector KD-A11B	1
	△ QSR0084-001	Voltage Select Switch	KD-A11U	1
65	E48729-003	Plastic Rivet	for PIN jack	2
66	SLP-155B-01V	LED	REC	1
67	VKL4712-001	Switch Bracket	for Reed SW P.W.B	1
68	53492-002	Rubber Bushing		2
69	T30302-063	Collar		2
70	T47861-003N	Lamp		2
71		M.M Capacitor	KD-A22J 0.022μF	1
	⚠ QFZ9008-223	"	KD-A22C 0.022μF	1
i	QCZ9015-103	Capacitor	KD-A11U	1
72	△ TAW000504-01	Wire Connector	KD-A22C/J	2
73	△ T47047-001	Capacitor Boot	KD-A22C/J	1
74	VYH43I5-002	Lamp Holder	ND-A226/3	2
75	VKL4275-001	Bracket	Voltage Select SW KD-A11U	1
101	NNS2600ZS	Nut	for Cassette Holder	1
102	REE2000	E ring	for Gear Frame Ass'y x 2	3
102	NLL2000	ETHIG	Amp Ass'y ~ Gear Dump x 1	3 1
103	WNS2600Z	Washer	for Brake Drum	1
103	WNS3000N	vvasitei ,,		
105		"	for Reed SW P.W.B	2
106	<u>Q03093-502</u> '' -524	11	for Top Cover	6
			for Spur Gear	1
108	SBSB2608Z	Tapping Screw	for Counter	1
109	SBSB3008Z		for Spring Bracket x 1	9
			Gear Dump x 1	
			Buttom Spring x 3	
			Switch Bracket x 2	
110	CDCD20407	,,,	Wire Holder x 2	
110	SBSB3010Z		for Lamp Cover x 2	
			Front Plate x 5	
444	000000107		Bottom Cover x 3	
111	SBSB3012Z	"	for Front Panel	4
112	SBSB3012V	"	for Main P.W.B	3
113	SDSP2608Z	Screw	for Brake Arm	1
114	SDSP2610RS	"	for Cassette Holder	1
115	SDSP3006VS	"	for Tape Selector	1
116	SPSP3006ZS	"	for Reed Swtich	1
117	SDSP3008RS	"	for Voltage Selector	2
117			KD-A11B/C/E/J	
		11	for Power Transformer	2
118	DPSP4012ZS		IOI I OWEL I TALISTOTTIEL	
	DPSP4012ZS LDSP2604R	Ass'y Screw	Arm Ass'y	1
118				
118			Arm Ass'y ∼ cassette holder	
118 119	LDSP2604R	Ass'y Screw	Arm Ass'y cassette holder for Power Switch x 2	1
118 119	LDSP2604R LPSP3006ZS	Ass'y Screw	Arm Ass'y cassette holder for Power Switch x 2 for Bracket (KD-A11U) x 2	1 4
118 119 120	LDSP2604R LPSP3006ZS SDSB4010R	Ass'y Screw Screw	Arm Ass'y cassette holder for Power Switch x 2 for Bracket (KD-A11U) x 2 for Top Cover	1 4 6
118 119 120	LDSP2604R LPSP3006ZS	Ass'y Screw Screw	Arm Ass'y cassette holder for Power Switch x 2 for Bracket (KD-A11U) x 2	1 4

Enclosure Ass'y and Electrical Parts (Except P.W. Board Parts)



Main Amp. P.W. Board Parts



		1	2	3	4	5	6	7	8
IC101	E. Voltmeter	7.08	7.17	7.61	7.07	6.98	7.17	6.44	0
201	C. Tester	9.2	7.0	7.4	7	4.8	7.0	6.7	0
IC901	E. Voltmeter	10.61	10.66	10.63	0	10.63	10.64	10.61	21.3
	C. Tester	11	11	11	0	11	11	11	21.5

		9	10	11	12	13	14	15	16
IC101	E. Voltmeter	0	7.06	7.08	7.05	0	7.1	6.92	13.73
201	C. Tester	0	7.0	7.0	6.9	0	6.9	6.4	14

	E. '	Voltme	ter	С	. Teste	r
	Е	С	В	E	С	В
X 101 201	1.12	2.67	0.58	1.0	2.7	0.5
X 102 202	2.07	6.87	2.67	2.0	6.6	2.7
X103 203	0	0	0.7	0	0	0.7
X 1	1.24	20.1	-0.14	1.2	20.5	-0.2
X2	1.24	20.1	-0.14	1.2	20.5	-0.2
X181 281	0.85	7.54	1.42	0.82	6.9	1.1
X61	0.019	0.116	0.71	0.02	0.12	0.7
X62	0.019	24.8	0.116	0.02	25	0.12
X63	0	0.06	0.68	0	0.05	0.68
X64	0	0.68	0	0	0.68	0
X65	0	6.59	0	0	6.6	0
X66	0.01	0.32	0.85	0	0	0.84
X51	21.2	25.11	21.9	21.5	26	22

Main Amp. P.W. Board Parts List

♠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

Ref. No.	Parts No.	Parts Name	Re	marks	Q'ty
	∆VMW1541-002A	P.W.B	.		1
R100,200	QRD143J-333S	C. Resistor	$33k\Omega$	1/4W	2
R101,201,1,2	QRD141J-393SY	"	$39k\Omega$	"	4
R102,202,136,236	QRD143J-102S	"	lkΩ	"	6
147,247					
R103,203,122,222	QRD143J-223S	"	$22k\Omega$	"	10
187,287,190,290					
61,74					
R104,204,	QRD141J-334SY	"	330 k Ω	"	2
R105,205,153,253	" -104SY	"	100kΩ	"	7
189,289,71		,,			
R106,206	'' -472SY	,,,	4.7kΩ	"	2
R107,207,191,291	-15251	"	1.5kΩ		4
R108,208	-22131		220Ω	77	2
R109,209	QRD141J-121SY	C. Resistor	120Ω		2
R118,218	" -151SY	"	150Ω		2
R110,210	-50351	"	56kΩ	"	2
R111,211,114,214	-22451	,,	220kΩ	"	4
R113,213	'' -822SY '' -392SY	"	8.2kΩ	,,	2 2
R137,237	-39251 '' -273SY	,,	3.9kΩ		2
R115,215 R116,216,125,225	-27351 " -332SY	""	$27k\Omega$ $3.3k\Omega$	"	2
143,243	-33231		3.3K42		0
R117,217	" -123SY	"	12k Ω	"	2
R119,219,132,232	'' -222SY	"	$2.2k\Omega$	"	10
150,250,134,234	22251		2.21(0)		'0
186,286				11	
R121,221	'' -471SY	"	470Ω	"	2
R123,223,124,224	" -181SY	"	180Ω	11	4
R126,226	" -474SY	"	470kΩ	"	2
R127,227,128,228	" -473SY	"	47kΩ	"	4
R129,229	QRD141J-184SY	C. Resistor	180kΩ	",	2
R131,231	" -274SY	"	270kΩ	"	2
R139,239	QRD143J-223S	"	22kΩ	//	2
R141,241	QRD141J-274SY	"	270k Ω	"	2
R142,242	QRD143J-824S	"	820Ω	"	2
R144,244	" -151S	"	150Ω	"	2
R138,238	QRD141J-183SY	"	18k Ω	"	2
R151,251	" -272SY	"	. 2.7kΩ	′′	2
R152,252	QRD143J-103S	"	10kΩ	"	2
R181,281,182,282	QRD141J-563SY	"	56kΩ	"	4
R183,283	" -393SY	" "	39kΩ	"	2
R184,284	-0235 Y	"	82kΩ	"	2
R185,285	-02351	"	82kΩ	"	2
R188,288	-12001	"	1.5MΩ	,,	2
R192,292,193,293 194,294	" -101SY		100Ω		2
R195,295	" -683SY	"	001.0	"	
R196,296	-0035 f '' -473SY	"	68k Ω 47k Ω	,,	2 2
R3	QRD147J-100S	11	10Ω	1/4W	1
R4	AQRD149J-470S	Unflammable Resistor	47Ω	1/400	1
R5	△QRD149J-680S	"	68Ω	"	1
R6	△QRG019J-151S	"	150Ω	1W	1
R7	△QRD149J-100S	"	10Ω	1/4W	1
R51	<u></u>	"	8.2Ω	1/2W	1
R52	∆QRD149J-102S	"	1kΩ	1/4W	1
R53	∆QRD149J-330S	"	33Ω	"	1 1
R62	QRD141J-473SY	C. Resistor	47kΩ	"	i
R63	" -222SY	"	$2.2k\Omega$	"	li
R64	QRD147J-333S	"	33kΩ	"	1
R66	QRD147J-153S	"	15kΩ	"	1
R67	" -152SY	"	1.5k Ω	"	1
R68	<u></u>	O.M.F. Resistor	68Ω	2W	1
R69	△ QRD121K-2R2	C. Resistor	2.2Ω	1/2W	1 1

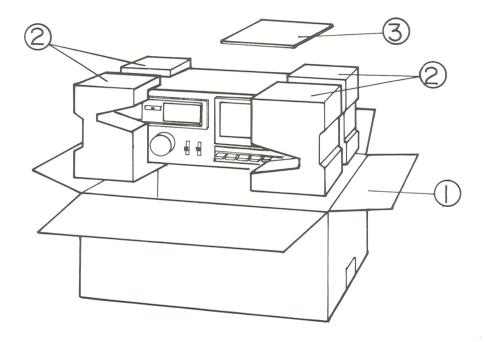
Ref. No.	Parts No.	Parts Name	Rei	marks	Q't
R70	∆ QRG019J-102	O.M.F. Resistor	1kΩ	1W	1
R72	QRD141J-472SY	C. Resistor	4.7 k Ω	1/4W	1
R73,75	QRD147J-6R8S	"	6.8 Ω	11	2
R76	" -332SY	"	$3.3k\Omega$	"	1
R77	" -222SY	"		"	1
	'' -472SY	, , , , , , , , , , , , , , , , , , , ,	2.2kΩ	,,	
R78		"	$4.7k\Omega$		1
R79	-10331		10 k Ω	"	1
R901	∆ QRG019G-181	O.M.F. Registor	180 Ω	1W	1
R902	QRD147J-182S	C. Resistor	1.8k Ω	1/4W	1
R914,915	QRD143J-683S	"	$68k\Omega$	"	2
	QWY123-019	Bus Wire	P=10mm		21
C101,201				051/	
	QEB41EM-106M	E. Capacitor (Low Leak)	10μF	25V	2
C104,204	QCS11HJ-451	C. Capacitor	450pF	50V	2
C103,203	′′ -221	"	220pF	//	2
C105,205	QET41ER-336W	E. Capacitor	33μF	25V	2
C106,206,122,222	QCS11HK-101	C. Capacitor	10pF	50V	4
C107,207,111,211	QET41AR-107N	E. Capacitor	100μF	10V	5
66	QL141AII-10/II	L. Capacitoi	Ιουμι	10 V	5
	0.004.41114.000		00 5	=0::	_
C108,208	QCS11HK-680	C. Capacitor	68pF	50V	2
C109,209,142,242	QET41ER-476F	E. Capacitor	47μF	25V	6
144,244					
C110,210,143,243	QFT41HR-475N	"	4.7μF	50V	4
C112,212	QFM41HJ-153	Mylar Capacitor		50V	2
		iviyiai Gapacitoi	0.015μF	50 V	
C113,213	QFM41HJ-273		0.027μF	"	2
C121,221	QEB41HM-105M	E. Capacitor (Low Leak)	1 μF		2
C123,223,130,230	QFM41HJ-472	Mylar Capacitor	0.0047 _µ F	"	6
2,3					
C124,224,126,226	QET41HR-335N	E. Capacitor	3.3μF	"	4
C127,227	QCF11HP-102			"	
		C. Capacitor	0.001μF		2
C128,228	QFM41HJ-273	Mylar Capacitor	0.027μ F	"	2
C129,229,134,234	QET41HR-106N	E. Capacitor	10 μF	"	4
C132,232	QFM41HJ-562	Mylar Capacitor	0.0056μF	"	2
C133,233	QFM41HJ-473	"	0.047µF	"	1
C135,235	QEB41HM-104M	E. Capacitor (Low Leak)	0.1μF	"	
C136,236		L. Oapacitor (Low Leak)		"	2
	-334M	F 0	0.33 <i>μ</i> F	"	2
C137,237	QET41HR-475N	E. Capacitor	4.7μF		2
C138,238	QET41AR-227N	"	220μF	10V	2
C141,241,183,283	QET41HR-105N	"	1μF	50V	6
189,289				"	
C181,281	QFM41HJ-102	M. Canasitar	0.001μF	"	1
C182,282		M. Capacitor		"	
	QFM41HJ-152	Mylar Capacitor	0.0015μF	"	2
C184,284	QFM41HJ-104	"	0.1μF		2
C185,285	QET41ER-476N	E. Capacitor	47µF	25V	2
C187,287	QFM41HJ-103	Mylar Capacitor	0.Ó1μF	50V	2
C188,288	QFM41HJ-562	"	0.0056μF	′′	2
C190,290	QCS12HJ-201	C. Capacitor	200pF	"	2
C190,290 C191,291	QCS11HJ-391	o. Capacitoi	390pF	"	2
		"			1 2
C192,292	QFS32BK-221		220pF	F0) /	2
C195,295	QFM41HJ-392	Mylar Capacitor	0.0039μF	50V	2
C196,296	QCS11HJ-681	C. Capacitor	680pF	"	2
C1 .	QFP82AJ-223	Polypropylene capacitor	0.022 _µ F		1
C4	QFM41HJ-103	Mylar Capacitor	0.01μF	50V	li
C5		E. Capacitor	4.7μF		1
C6	QET41HR-475N	Polypropylone Consoiter		"	
	QFP82XJ-472	Polypropylene Capacitor	0.0047µF	4 00 4	1
C51	△QET41CR-477N	E. Capacitor	470 <i>μ</i> F	16V	1
C52,53	∆ QCF12HP-103	C. Capacitor	$0.01 \mu F$	50V	2
C54	△ QET41VR-477N	E. Capacitor	470 µF	35V	1
C55	QET41ER-477N	"	470µF	25V	1
C56		"	and the same of the same		1
	△ QET41ER-337N		330µF	25V	1
C61	QET41VR-336N	E. Capacitor	33µF	35V	1
C62	QEB41EM-476N	E. Capacitor (Low Leak)	47μF	25V	1
C63	" -106M	"	10 _µ F	"	1
C65	⚠QET41VR-227N	E. Capacitor	220μF	35V	+ 1
	QET41HR-105N	E. Capacitor	220μF ΙμΕ	50V	1
^67			1 1771-	h(1)//	1 1
		,,			
C67 C901 C902	QET41CR-337N QET41CR-336N	"	330μF 33μF	16V	1 1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
VR101,201	QVE5A3A-054F	V. Resistor	Input level $50 \mathrm{k}\Omega$	2
	TAZ336499-03	Volume Lug	for Input level	1
VR102,202	QVP8AQB-024	V. Resistor	P.B and REC $20k\Omega$	4
181,281			20112	
VR103,203	QVP4A0B-224	"	Bias 22k Ω	2
VR104,204	QVP4A0B-104	"	Bias $10k\Omega$	2
VR151,251	QVP8A0B-013	,11	VU meter $1k\Omega$	2
L101,201	TAC000493-01	Indicator	11/22	2
L102,202	VQZ0009-001	Dolby NR Filter	81k	2
L103,203	VQZ0004-001	" ,	19k	2
L183,283	VQP0001-183	Indicator	TOR	2
L182,282	" -562	"		2
L2	VQH1009-012	OSC Coil		1
LZ	VMJ5002-002	Mic & HP. Jack Ass'y		1
	VMJ6002-002	PIN jack Ass'v		1
		, ,		1
6104 204	QMC9014-006	PIN Socket	(DIN	1
S104,204	QSP2210-061	Push Switch	for DIN	1
S101,201	QSSG201-102	Slide Switch	for R/P	1
S102,202	QSL2209-002	Lever Switch	for Dolby NR	1
S103,203	QSL8409-001		for Tape Selector	1
	VMZ0005-001	Post Pin		5
	E43727-002	Wrapping Tab		25
	E40130-001	Tab	for Lamp	2
	∆TAZ000331-02	Fuse Holder		6
F1,F2	△QMF51A2-R50	Fuse	KD-A11A/E	2
	△QMF51A2-R50BS	Fuse	KD-A11B	2
F3	△QFM51A2-R50		KD-A11A/E	1
	△QFM51A2-R63BS	"	KD-A11B	1
	VMH4003-001	Heat Sink	for X51	1
	SDSP3006ZS	Screw	Heat Sink ∼ P.W.B	1
	LPSP3008ZS	"	for X51	1
D61,62,63	MA150	Si. Diode		3
D151,251,152,252	0A90	Ge. Diode		4
D51,52,53,54	10E1-B	Si. Diode		6
67,903	DDC 05 (D2)	7		
D68	RD6.8E (B3)	Zener Diode		1
D55	ARD22E (B3)			1
X51	∆2SC1162 (BC)	Si. Transistor		1
X62	∆2SC1318 (R.S)	"		1
X101,201,102,202 181,281	2SC1327 (T.U)	"		6
X103,203,104,204 64,65	2SC1684 (R.S)	"		6
X1,2,61,63,66	2SC1685 (R.S)	"		5
IC101,201	NE646BN	IC	Dobly NR	2
IC901	UPC4557C	"	HP & VU meter Amp	1
			The a volunter range	'
	VMA4114-001	Shield Plate		1
	VMA4115-001	Shield Plate		1

Other P.W. Board Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
(LED)	⚠ VMW1541-002B ⚠ SLP-155B-01V	P.W.B. LED	REC	_ 1
(Reed Switch) R75 C68	⚠ VMW1541-002C TDS271409-01 QRD147J-182S QCF11HP-223 TER271414-01	P.W.B. Reed Switch C. Resistor C. Capacitor Spacer		1 1 1 1

Packing



Position of control and switch knobs at renew packing.

Power switch
Rec level control
Tape select
DOLBY NR

; OFF ; MIN ; SA/CrO2 ; ON

Mecha operation buttons; OFF Counter; 000.

Packing Material List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1~2	VPA3140-00B	Packing Case Ass'y	KD-A11A/B/E/J/U	1 set
1~2	" -00E	"	KD-A11C	1 set
1	VPA3140-003	Case	KD-A11A/B/E/J/U	1
1	" -006	"	KD-A11C	1
2	VPH2128-001	Cushion		2
	QPGA060-06005	Envelope	for set	1
	AP4056A-036	"	for power cord, provided cord	2
	OPGB024-03404	"	for Instruction Book	1
	TKS000501-01	Sheet	for set	1

No. 4192

Accessories

Parts No.	Parts Name	Remarks	Q'ty
VMP0002-00A	PIN Cord	KD-A11A/C/J/U	2
CN-201	DIN Cord	KD-A11B/E	1
VYA4001-00A	Head Cleaning Stick		1
VNN0062-301	Instruction Book		1
BT20029B	Warranty Card	KD-A11A	1
VND4013-001	Warning Label	KD-A11A	1
T46328-003	Caution Label	KD-A11A/B	1
VPZ4001-001	Serial Ticket	KD-A11A/J	1
BT20013C	Guarantee Certificate	KD-A11B	1
TJL000443-01	Seal	KD-A11B	1
	BEAB Label	KD A11D	4
VND4013-001		KD-A11B	1
OZL1002-003BS	Warning Label Warning Label	KD-A11B/E KD-A11B	1
T46328-005	Caution Label	KD-A11J	1
VNC5004-001	Mark Sticker	KD-A113 KD-A11B/E	1
VJD4011-002	Dolby NR Label	KD-A11B/C/E/J/U	
VPZ4001-001	Serial Ticket	KD-A11B/E/U	1
BT20025C	Warranty Card	KD-A11C	
T44362-001	CSA Marker	KD-A11C	1
TLT000505-01	UL/CSA Caution Label	KD-A11C/J	2
T43758-003	Serial Ticket	KD-A11C	2
T46328-004	Caution Label	KD-A11C	1
BT20032B	Warranty Card	KD-ATTE KD-A11J/U	1
BT20042	Special Replay Card	KD-A11J/U	1
E7795-1	EP Mark	KDA11U	1
V04062-001	Siemens Plug	KD-A11U	1
T46328-001	Caution Label	KD-A11U	1
VNC5311-101	Caution Card	1,12 1 1 1 2	1
BXN750110UU	JVC Mic Guide		1